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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,838	07/11/2001	Richard E. Fangman	5686-00300	2194

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EXAMINER
LEE, ANDREW CHUNG CHEUNG

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/903,838	FANGMAN ET AL.
	Examiner	Art Unit	
	Andrew C. Lee	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *12 May 2006*.

2a) ☐ This action is **FINAL**.　　　2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-8, 10-23, 25-38 and 40-45* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-8, 10-23, 25-38 and 40-45* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All　b) ☐ Some * c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Applicant's request for reconsideration of the finality of the rejection of the last Office

action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 1 – 8, 10 – 23, 25 – 38, 40 - 45 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Schuster et al. (US 6822957 B1) and Fijolek et al. (US 6577642 B1) and

further in view of Lee et al. (US6958992 B2).

Regarding claims 1, 31, Schuster et al. disclose the limitation of a method, memory

medium for configuring an IP telephone (recited "distributed network address translation in a

network telephone system" as a method, memory medium for configuring an IP telephone;

column 3, lines 18 – 32), comprising: receiving an identifier from the IP telephone (recited

"combination network address is created for the first network phone with the at least one locally

unique port and a common external network address" as receiving an identifier from the IP

telephone; column 3, lines 20 – 32; recited "mass storage system readable by CPU" as memory

medium; column 6, lines 9 – 18; column 8, lines 43 – 54; column 10, lines 23 – 32); determining

if the identifier is valid (recited ""determine the location of the callee, identified in the INVITE

request" as determining if the identifier is valid; column 8, lines 45 – 61); and if the identifier is

valid, assigning a range of port numbers to the IP telephone based on the identifier, wherein the

IP telephone is operable to use at least a subset of the range of port numbers to send or receive IP

communications (recited "request a set of locally unique ports from router for external

communications", "assigned thirty-two locally unique ports in the range of 1026 – 1057" as

operable to use at least a subset of the range of port numbers to send or receive IP

communications; column 11, lines 1 – 12; column 16, lines 13 – 20). Schuster et al. do not

disclose explicitly receiving an identifier from the IP telephone; determining if a MAC ID for the

IP telephone is valid; if the MAC ID is determined to be valid, determining if the identifier is

valid. Fijolek et al. disclose the limitation of determining if a MAC ID for the CM is valid; if the

MAC ID is determined to be valid (column 21, lines 12 – 30). However, Fijolek et al. also do not

disclose explicitly receiving an identifier from the IP telephone; determining if a MAC ID for the

IP telephone is valid; if the MAC ID is determined to be valid, determining if the identifier is

valid. Lee et al. disclose the limitation of receiving an identifier from the IP telephone (recited

"IP phone then sends a request for registration to the IP phone service provider, which includes

its MAC address and set type" as an identifier from the IP telephone; column 3, lines 16 – 32,

Fig. 3, element 318, Reg Device (MAC, IP address, Set Type); determining if a MAC ID for the

IP telephone is valid (recited "upon receipt of the validation request" as determining if a MAC

ID for the IP telephone is valid; column 3, lines 44 – 45, Fig. 3, elements 334 Validate

PIN(MAC,PIN)); if the MAC ID is determined to be valid, determining if the identifier is valid

(recited "the access code is then validated" as the MAC ID is determined to be valid, and " Valid

PIN" as determining if the identifier is valid; column 3, lines 49 – 55, FIG. 3, element 336 Valid PIN(MAC)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. and Fijolek et al. to include receiving an identifier from the IP telephone; determining if a MAC ID for the IP telephone is valid; if the MAC ID is determined to be valid, determining if the identifier is valid such as that taught by Lee et al. in order to provide a method and apparatus for registering IP phones with an IP phone switch using access codes or personal identification numbers for authentication and for associating directory numbers to MAC address of IP phones (as suggested by Lee et al., see column 1, lines 39 – 42).

Regarding claims 2, 17, 32, Schuster et al. disclose the limitation of the method, system of claimed wherein said range of port numbers comprises ports which are not reserved for use by other IP protocols (recited "request a set of locally unique ports from router for external communications", "assigned thirty-two locally unique ports in the range of 1026 – 1057" as operable to use at least a subset of the range of port numbers to send or receive IP communications; column 11, lines 1 – 12; column 16, lines 13 – 20)

Regarding claims 3, 15, 18, 30, 33, 45, Schuster et al. disclose the limitation of the method of claimed further comprising: mediating IP communications between the IP telephone and an IP device, wherein the IP telephone uses at least a subset of the range of port numbers to send or receive said IP communications (recited "request a set of locally unique ports from router for external communications", "assigned thirty-two locally unique ports in the range of 1026 –

1057" as operable to use at least a subset of the range of port numbers to send or receive IP communications; column 11, lines 1 – 12; column 16, lines 13 – 20).

Regarding claims 4, 6, 19, 34, 21, 36, Schuster et al. disclose the limitation of the method, system of claimed, wherein said mediating the IP communications comprises: receiving a data packet from the IP telephone, performing a network address persistent port translation (NAPPT) on the data packet (recited "Network Address Translation" as network address persistent port translation (NAPPT) on the data packet, Fig. 9, column 15, lines 32 – 47); and sending the data packet to the IP device (recited "forwards the response data packets to network layer" as sending the data packet to the IP device; column 18, lines 30 – 33).

Regarding claims 5, 20, 35, Schuster et al. disclose the limitation of the method, system of claimed wherein the data packet comprises a private source IP address (recited "local IP address" as private source IP address; column 3, lines 2 – 3), a source port number (recited "locally unique port" as a source port number; column 3, lines 20 – 22), and destination information associated with the IP device (recited "a common external network address" as destination information associated with the IP device; column 3, lines 24 – 32), wherein the private source IP address comprises a private IP address of the IP telephone, and wherein the source port number comprises a port number in the assigned range of port numbers (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32; recited "request a set of locally unique ports from router for external communications", "assigned thirty-two locally unique ports in the range of 1026 – 1057" as operable to use at least a subset of the range of port numbers to

send or receive IP communications; column 11, lines 1 – 12; column 16, lines 13 – 20); and

wherein said performing a network address persistent port translation (NAPPT) on the data

packet comprises changing the private source IP address to a public source IP address while

leaving the source port number unchanged, and wherein the public source IP address and the

source port number may be used to uniquely identify the IP telephone (Fig. 9, column 15, lines

32 – 47; column 16, lines 13 – 20).

Regarding claims 7, 22, 37, Schuster et al. disclose the limitation of the method, system

of claimed wherein the data packet comprises a public destination IP address, a destination port

number; and source information associated with the IP device, wherein the destination port

number comprises a port number in the assigned range of port numbers, and wherein the public

destination IP address and the destination port number may be used to uniquely identify the IP

telephone (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32; column

16, lines 13 – 20); and wherein said performing a network address persistent port translation

(NAPPT) on the data packet comprises using the public destination IP address and the

destination port number to uniquely identify the IP telephone, and changing the public

destination IP address to a private destination IP address while leaving the destination port

number unchanged, wherein the private IP address comprises an IP address of the IP telephone

(Fig. 9, column 15, lines 32 – 47; column 16, lines 13 – 20).

Regarding claim 16, Schuster et al. disclose the limitation of a system for performing IP

telephony, comprising: a network (recited "a network telephony system" as a network; Fig. 1,

column 5, line 16 – 24); an IP telephone (recited "network phones" as IP telephone; Fig. 1,

element 22, column 5, lines 24 – 26); a Service Gateway, wherein the Service Gateway is

operable to couple to the IP telephone through the network (column 6, lines 23 – 25); wherein

the IP telephone is operable to send an identifier to the Service Gateway; wherein the Service

Gateway is operable to: receive an identifier from the IP telephone; determine if the identifier is

valid; and if the identifier is valid, assign a range of port numbers to the IP telephone based on

the identifier; wherein the IP telephone is operable to use at least a subset of the range of port

numbers to send or receive IP communications (column 8, lines 52 – 55; column 11, lines 1 – 12,

column 16, lines 13 – 20). Schuster et al. do not disclose explicitly receiving an identifier from

the IP telephone; determining if a MAC ID for the IP telephone is valid; if the MAC ID is

determined to be valid, determining if the identifier is valid. Fijolek et al. disclose the limitation

of determining if a MAC ID for the CM is valid; if the MAC ID is determined to be valid

(column 21, lines 12 – 30). However, Fijolek et al. also do not disclose explicitly receiving an

identifier from the IP telephone; determining if a MAC ID for the IP telephone is valid; if the

MAC ID is determined to be valid, determining if the identifier is valid. Lee et al. disclose the

limitation of receiving an identifier from the IP telephone (recited "IP phone then sends a request

for registration to the IP phone service provider, which includes its MAC address and set type"

as an identifier from the IP telephone; column 3, lines 16 – 32, Fig. 3, element 318, Reg Device

(MAC, IP address, Set Type); determining if a MAC ID for the IP telephone is valid (recited

"upon receipt of the validation request" as determining if a MAC ID for the IP telephone is valid;

column 3, lines 44 – 45, Fig. 3, elements 334 Validate PIN(MAC,PIN)); if the MAC ID is

determined to be valid, determining if the identifier is valid (recited "the access code is then

validated" as the MAC ID is determined to be valid, and " Valid PIN" as determining if the identifier is valid; column 3, lines 49 – 55, FIG. 3, element 336 Valid PIN(MAC)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. and Fijolek et al. to include receiving an identifier from the IP telephone; determining if a MAC ID for the IP telephone is valid; if the MAC ID is determined to be valid, determining if the identifier is valid such as that taught by Lee et al. in order to provide a method and apparatus for registering IP phones with an IP phone switch using access codes or personal identification numbers for authentication and for associating directory numbers to MAC address of IP phones (as suggested by Lee et al., see column 1, lines 39 – 42).

Regarding claims 8, 23, 38, Schuster et al. disclose the limitation of a method, system for configuring an IP telephone, comprising: receiving an identifier from the IP telephone (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32). Schuster et al. does not disclose expressly the method, system of claimed wherein the identifier comprises a vendor class identifier. Fijolek et al. disclose the limitation of the method, system of claimed wherein the identifier comprises a vendor class identifier (column 10, lines 60 – 67; column 11, lines 5 – 9; column 11 – 12, Table 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. to include of the method, system of claimed wherein the identifier comprises a vendor class identifier such as that taught by Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a

cable television network, a public switched telephone network, a telephony remote access

concentrator and a data network (e.g. the Internet). The cable modem termination system and the

telephony remote access concentrator together are called a "telephony return termination system

(as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines

1 – 7).

Regarding claims 10, 25, 40, Schuster et al. disclose the limitation of a method, system

for configuring an IP telephone, comprising: receiving an identifier from the IP telephone

(column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32). Schuster et al. does

not disclose explicitly the method, system of claimed wherein said identifier is comprised in a

DHCP discover message, the method further comprising: issuing a DHCP offer to the IP

telephone if the identifier is determined to be valid, wherein the DHCP offer comprises DHCP

lease information based on the validated identifier; the IP telephone issuing a DHCP request in

response to the issued DHCP offer; storing the DHCP lease information in response to the issued

DHCP request; the IP telephone storing the DHCP lease information; and the IP telephone

enabling DHCP settings comprised in the DHCP lease information. Fijolek et al. disclose the

limitation of the method, system of claimed wherein said identifier is comprised in a DHCP

discover message, the method further comprising: issuing a DHCP offer to the IP telephone if the

identifier is determined to be valid, wherein the DHCP offer comprises DHCP lease information

based on the validated identifier (Fig. 13, elements 270, 278, 280, 282, 286; column 25, lines 40

– 63); the IP telephone issuing a DHCP request in response to the issued DHCP offer; storing the

DHCP lease information in response to the issued DHCP request; the IP telephone storing the

DHCP lease information; and the IP telephone enabling DHCP settings comprised in the DHCP

lease information (Fig. 13, elements 300, 302, 308, 312, 318, 322, 320, 324; column 25, lines 40

– 63; column 26, lines 44 – 64). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify Schuster et al. to include of the method, system of

claimed wherein said identifier is comprised in a DHCP discover message, the method further

comprising: issuing a DHCP offer to the IP telephone if the identifier is determined to be valid,

wherein the DHCP offer comprises DHCP lease information based on the validated identifier;

the IP telephone issuing a DHCP request in response to the issued DHCP offer; storing the

DHCP lease information in response to the issued DHCP request; the IP telephone storing the

DHCP lease information; and the IP telephone enabling DHCP settings comprised in the DHCP

lease information as that taught Fijolek et al. in order to provide a variety of service offerings via

and through a data-over-cable system, an exemplary data-over-cable system with telephony

return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable

modem termination system, a cable television network, a public switched telephone network, a

telephony remote access concentrator and a data network (e.g. the Internet). The cable modem

termination system and the telephony remote access concentrator together are called a

"telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5;

column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 11, 12, 26, 27, 41, 42, Schuster et al. disclose the limitation of the

method, system of claimed, wherein the range of port numbers and information indicating

operational software for the IP telephone (column 5, lines 55 – 67; column 13, lines 14 – 21;

column 16, lines 13 – 20), the method further comprising: the IP telephone executing the

indicated operational software to enable said IP communications (column 13, lines 14 – 21;

column 16, lines 13 – 20; column 6, lines 3 – 23). Schuster et al. do not disclose expressly the

method, system of claimed wherein said DHCP lease information. Fijolek et al. disclose the

limitation of the method, system of claimed wherein said DHCP lease information (column 24,

lines 40 – 67). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Schuster et al. to include of the method, system of claimed

wherein said DHCP lease information such as that taught by Fijolek et al. in order to provide a

variety of service offerings via and through a data-over-cable system, an exemplary data-over-

cable system with telephony return includes customer premise equipment (e.g. a customer

computer), a cable modem, a cable modem termination system, a cable television network, a

public switched telephone network, a telephony remote access concentrator and a data network

(e.g. the Internet). The cable modem termination system and the telephony remote access

concentrator together are called a "telephony return termination system (as suggested by Fijolek

et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 13, 28, 43, Schuster et al. disclose the limitation of a method, system

for configuring an IP telephone, comprising: receiving an identifier from the IP telephone

(column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32). Schuster et al. do

not disclose explicitly the method of claimed wherein said issuing the request for the operational

software comprises issuing a read request to a file transfer server, wherein said file transfer

server performs said providing the operational software to the IP telephone. Fijolek et al.

disclose the limitation of the method of claimed wherein said issuing the request for the

operational software comprises issuing a read request to a file transfer server, wherein said file

transfer server performs said providing the operational software to the IP telephone (receives a

configuration file from a configuration filer server" as transfer server performs said providing the

operational software to the IP telephone; column 9, lines 32 – 35; column 25, lines 65 – 67;

column 26, lines 1 – 13). It would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Schuster et al. to include the method of claimed wherein

said issuing the request for the operational software comprises issuing a read request to a file

transfer server, wherein said file transfer server performs said providing the operational software

to the IP telephone such as that taught Fijolek et al. in order to provide a variety of service

offerings via and through a data-over-cable system, an exemplary data-over-cable system with

telephony return includes customer premise equipment (e.g. a customer computer), a cable

modem, a cable modem termination system, a cable television network, a public switched

telephone network, a telephony remote access concentrator and a data network (e.g. the Internet).

The cable modem termination system and the telephony remote access concentrator together are

called a "telephony return termination system (as suggested by Fijolek et al., see column 5, lines

4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 14, 29, 44, Schuster et al. discloses the limitation of a method, system

for configuring an IP telephone, comprising: receiving an identifier from the IP telephone

(column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32). Schuster et al. do

not disclose explicitly the method, system of claimed wherein the file transfer server comprises a

TFTP (Trivial File Transfer Protocol) server. Fijolek et al. disclose the limitation of the method, system of claimed wherein the file transfer server comprises a TFTP (Trivial File Transfer Protocol) server (recited "TFTP layer" as a TFTP (Trivial File Transfer Protocol) server; column 9, lines 32 – 35; column 25, lines 65 – 67; column 26, lines 1 – 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. to include of the method, system of claimed wherein the file transfer server comprises a TFTP (Trivial File Transfer Protocol) server such as that taught by Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a "telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7). Reference Lee et al. also teach TFTP server (Fig. 2, element 304 TFTP Server).

Response to Arguments

4.   Applicant's arguments filed 05/12/2006with respect to claims 1 – 8, 10 – 23, 25 – 38, 40 – 45 have been fully considered but they are not persuasive.
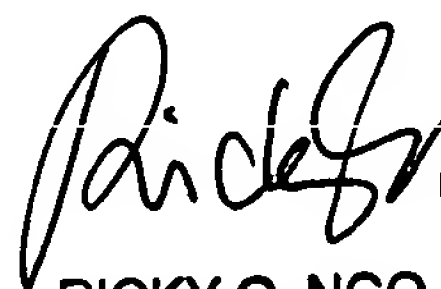
Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The

examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ACL   June 08, 2006

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER